

Fifth Annual Conference on Carbon Capture & Sequestration

Steps Toward Deployment

Public Acceptance

Raising Awareness for Carbon Sequestration: Activities of the Regional Carbon Sequestration Partnerships

Dan Daly

Plains CO₂ Reduction (PCOR) Partnership

On behalf of the Outreach Working Group

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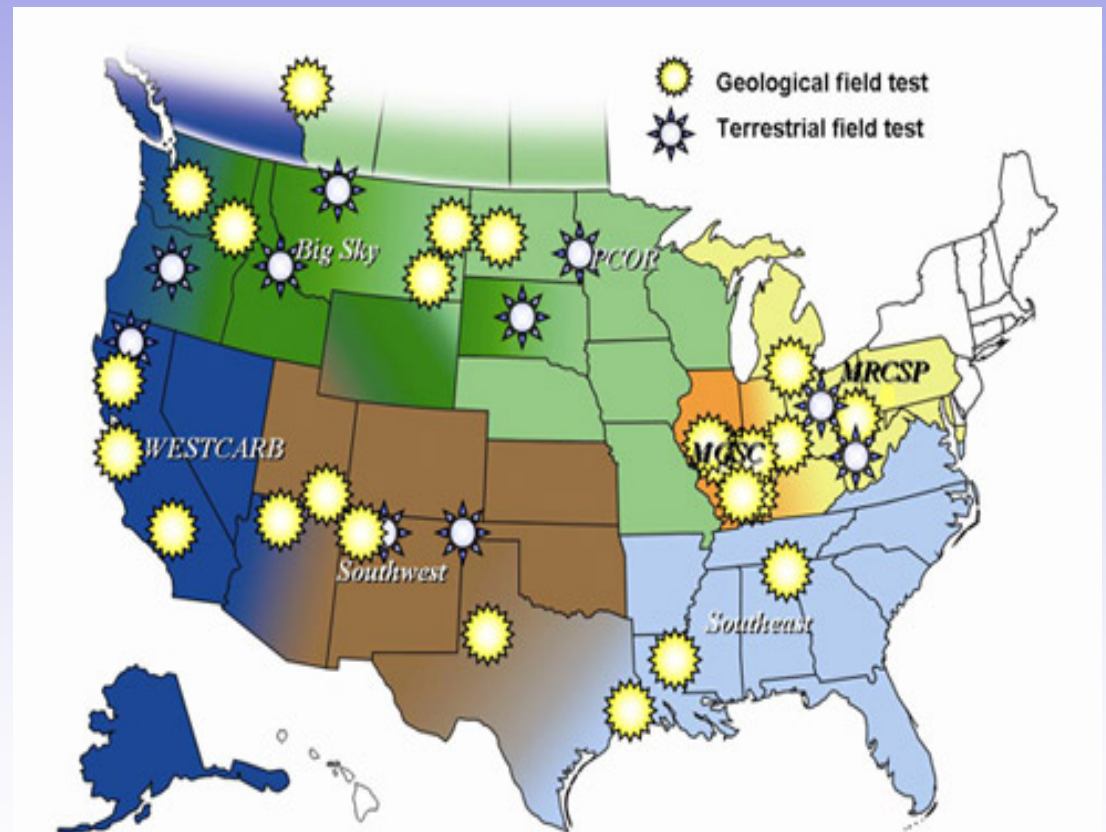
Presentation Overview

- Outreach framework and goals
- Outreach challenges
- Partnership activities
- Wrap-up

Regional Carbon Sequestration Partnership Program Validation Phase

At a glance:

- Seven regional partnerships
- 31 sequestration validation tests: 24 geologic and seven terrestrial
- 41 states, three Indian nations and four Canadian provinces
- Outreach audiences:
 - General public
 - Validation site populations
 - Decision Makers
 - Opinion Leaders



Outreach Working Group (Regional Partnership Outreach Leads)

- PCOR Partnership – Dan Daly
- SECARB – Kathy Baskin and Gary Garrett
- MRCSP – Judith Bradbury and Sarah Wade
- Southwest – Dave Curtiss and Tarla Peterson
- MGSC – Hannes Leetaru and Sallie Greenberg
- WESTCARB – Sally Benson and Rich Myhre
- Big Sky – Eva Lucero and Pamela Tomski

Validation Phase Outreach Mission

- Raise awareness regarding sequestration
 - General public
 - Key stakeholders (focus on validation site areas)
- Build a set of materials and capabilities to support outreach to the general public and key stakeholders
- Determine the factors that influence public opinion about sequestration

Are you thinking about carbon sequestration?



Outreach Challenge

**CO₂ Sequestration Validation Is Happening. . .
But Sequestration Is Not a Household Word!**

- Gallup 2006: 74% of Americans say they understand climate change “very well” or “fairly well”
- Yet, knowledge of CO₂, CO₂ management challenges, and CO₂ management options – including sequestration – is minimal



Meeting the Challenge

- Validation projects allow partnerships to “kick the tires” on technology and outreach
- Use real-world experience from validation projects to raise awareness at local and regional level and to fine-tune outreach approach
- Share lessons between regions through Outreach Working Group

Partnership Outreach Activities

- Plains CO₂ Reduction (PCOR) Partnership
- Midwest Regional Carbon Sequestration Partnership (MRCSP)
- Midwest Geologic Sequestration Consortium (MGSC)
- Southeast Regional Carbon Sequestration Partnership (SECARB)
- Southwest Regional Carbon Sequestration Partnership (Southwest)
- West Coast Regional Carbon Sequestration Partnership (WESTCARB)
- Big Sky Regional Carbon Sequestration Partnership (Big Sky)

PCOR Partnership Region Outreach Considerations

- International area
- Population of 28 million in nine U.S. states and the three Canadian prairie provinces
- Populations in vicinity of four sequestration validation tests and key stakeholder groups at local, regional, and national level
- Economy based on agriculture, fossil fuel extraction, and forest products
- Rural and urban components

PCOR Partnership Outreach Approach

- Partnership-led in regional outreach and collaboration with site operators for local outreach
- Regional and site level outreach plans
- Flexible outreach tool kit (TV shows and DVDs, fact sheets, Web site, briefing materials) to serve a variety of needs
- Share lessons learned and materials with other regions through DOE NETL's RCSP Outreach Working Group

PCOR Partnership Validation Phase – New Tools

- Four new television productions
- Enhanced regional carbon atlas (linked to NATCARB)
- Enhanced Web site (monthly and annual updates)
- Fact sheets, display booth, briefing materials



MRCSP

- IN, KY, MI, MD, OH, PA, WV
- Validation phase to include three geologic, three terrestrial, and a few “piggyback” opportunities.
- Emphasis on Web site and general briefing materials for general audiences.
- Working closely with companies hosting the field validation tests to build on existing relationships with local stakeholders.
- Will conduct interviews, focus groups, and other research activities to develop better understanding of key factors. Coordinating research with other partnerships in effort to draw larger lessons.

MGSC

- IL, IN, KY
- Focused on geologic sequestration in three types of reservoirs: enhanced oil recovery (EOR), unminable coal seams, saline reservoirs.
- Major emphasis linking the physical geology and the concept of geologic sequestration.
- Developed educational workshops to dispel common misunderstandings revealed in research and to teach concepts of permeability, porosity, chemical reactions, and physical structure.
- Developed physical sequestration demonstration model.
- Will continue with Web site, briefings, and other outreach activities.

SECARB

- AL, AR, FL, GA, LA, MS, NC, SC, TN, TX, VA
- **Presentations at Conferences and Workshops**
 - SME Annual Meeting
 - International Coalbed Methane Symposium
 - Fifth Annual Conference on Carbon Sequestration & Carbon Capture
 - Virginia Hydrogen Economy Roundtable
 - Virginia Tech Research Forum
- **Major Industry Briefing**
 - 1 ½ Day workshop with detailed presentations on Phase II projects
- **Website Updates**
 - www.secarbon.org
 - CO2 sequestration research
 - SECARB Coal group
- **Outreach Participation by SECARB Members**
 - Coal Group – Eastern Coal Council Directors Meeting
 - National Coal Council Meeting
 - International Meeting: Carbon Sequestration Leadership Forum
 - Gasification Technologies Council Workshop
 - Overview to Associate Members of Southern States Energy Board
 - SSEB Clean Coal Committee

SOUTHWEST

- AZ, CO, KS, NM, OK, TX, UT, WY
- CO₂ Sequestration pilot projects include (a) deep saline aquifer and EOR with sequestration; (b) ECBM with sequestration, with produced water desalination, and terrestrial riparian restoration sequestration; (c) EOR with sequestration, and (d) regional terrestrial analysis
- Emphasis on web site, interactive workshops with potential industry partners, electronic informational briefings for communities throughout region
- Working closely with companies hosting field validation tests to increase public understanding of and interest in CCS
- Will enhance web site, continue workshops and briefings; will conduct focus groups and other research activities to develop better understanding of key factors; will coordinate research with other partnerships to draw larger lessons

WESTCARB

- AK, AZ, CA, NV, OR, WA + BC in Canada
- Geologic pilots: 3 with CO₂ injection, plus 2 additional site characterizations
- Terrestrial pilots: 2 with 2-3 elements each (afforestation, fire management, forest conservation)
- Goal: Build stakeholder knowledge and support for pilots *and* future full-scale deployment
- Approach: Develop detailed strategy for each key stakeholder group; implement, monitor and revise

WESTCARB (cont)

- **Outreach Methods**
 - Engagement of broad set of partners (>70); leverage established relationships and capabilities
 - Comprehensive collateral materials and website
 - Face-to-face briefings with officials/executives, opinion leaders and site neighbors
 - Pilot site tours
 - Open public forums
 - Technical/trade and community-focused presentations
 - Media relations
- University partner conducting independent public perception research – feedback to guide outreach

BIG SKY

- ID, MT, SD, WY
- Established the Big Sky Energy Forum
- Established the Big Sky Energy Future Coalition
- Produce Big Sky Annual Energy Report
- Working with the Ruckelshaus Institute (University of Wyoming) on issues of regulatory compliance and NEPA

What Is Available Now?

- U.S. Department of Energy (DOE) National Energy Technology Laboratory (NETL) Web site (www.netl.doe.gov/)
- Partnership Web sites
- Regional atlases
- *Nature in the Balance* DVD (30-minute introduction to CO₂ management and sequestration); video segments
- Select fact sheets
- PowerPoint file

Summary

- Common elements include fact sheets, Web sites and briefings, and informational posters.
- New materials in validation phase reflect knowledge gained during Phase I and focus on communities hosting validation tests.
- Validation phase opinion research intended to highlight factors that drive the public's opinion of sequestration and help focus future outreach efforts.

To learn more:

NETL Web site (www.netl.doe.gov/)

Regional Partnership Web Sites